

What is claimed is:

1. A method for synchronizing data between a network server and a mobile device, comprising:

receiving a plurality of object instances from the network server;

selecting at least one object instance from the plurality of object instances; and

for each selected object instance:

recursively searching the plurality of object instances to identify related object instances,

sorting the related object instances,

sending the sorted object instances to the mobile device, and

sending the selected object instance to the mobile device.

2. The method of claim 1, wherein each of the plurality of object instances has a key and a plurality of data elements.

3. The method of claim 2, wherein said selecting includes filtering the plurality of object instances based on at least one data element.

4. The method of claim 2, wherein said sorting is based on a hierarchical relationship to the selected object instance.

5. The method of claim 2, further comprising:

extracting object instances previously sent to the mobile device from the sorted object instances.

6. The method of claim 2, wherein the data element of at least one of the plurality of object instances includes a reference to a related object instance.

7. The method of claim 6, wherein the reference is the key of the related object instance.

8. The method of claim 5, further comprising:

associating a synchronization key with each of the plurality of object instances.

9. The method of claim 8, wherein the reference is the synchronization key associated with the related object instance.

10. A computer-readable medium including instructions adapted to be executed by at least one processor to implement a method for synchronizing data between a network and a mobile device, the method comprising:

receiving a plurality of object instances from the network server;

selecting at least one object instance from the plurality of object instances; and

for each selected object instance:

recursively searching the plurality of object instances to identify related object instances,

sorting the related object instances,

sending the sorted object instances to the mobile device, and

sending the selected object instance to the mobile device.

11. The computer-readable medium of claim 10, wherein each of the plurality of object instances has a key and a plurality of data elements.

12. The computer-readable medium of claim 11, wherein said selecting includes filtering the plurality of object instances based on at least one data element.

13. The computer-readable medium of claim 11, wherein said sorting is based on a hierarchical relationship to the selected object instance.

14. The computer-readable medium of claim 11, wherein the method further comprises:

extracting object instances previously sent to the mobile device from the sorted object instances.

15. The computer-readable medium of claim 14, wherein the data element of at least one of the plurality of object instances includes a reference to a related object instance.

16. The computer-readable medium of claim 15, wherein the reference is the key of the related object instance.

17. The computer-readable medium of claim 14, wherein the method further comprises:

associating a synchronization key with each of the plurality of object instances.

18. The computer-readable medium of claim 17, wherein the reference is the synchronization key associated with the related object instance.

19. A system for synchronizing data between a network server and a mobile device, comprising:

a processor coupled to a network; and

a memory, coupled to the processor, storing data and instructions adapted to be executed by the processor to:

receive a plurality of object instances from the network server,

select at least one object instance from the plurality of object instances, and

for each selected object instance:

recursively search the plurality of object instances to identify related object instances,

sort the related object instances,

send the sorted object instances to the mobile device, and

send the selected object instance to the mobile device.

20. The system of claim 19, wherein each of the plurality of object instances has a key and a plurality of data elements.

21. The system of claim 20, wherein said select includes filtering the plurality of object instances based on at least one data element.

22. The system of claim 20, wherein said sort is based on a hierarchical relationship to the selected object instance.

23. The system of claim 20, wherein the instructions further comprise:

extract object instances previously sent to the mobile device from the sorted object instances.

24. The system of claim 23, wherein the data element of at least one of the plurality of object instances includes a reference to a related object instance.

25. The system of claim 24, wherein the reference is the key of the related object instance.

26. The system of claim 23, wherein the instructions further comprise:
associate a synchronization key with each of the plurality of object instances.

27. The system of claim 26, wherein the reference is the synchronization key associated with the related object instance.